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THESIS

MERIT PAY AS A MOTIVATOR
IN THE FEDERAL SECTOR

by

James D. Engel

June 1982

Thesis Advisor: John W. Creighton

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to the results of data gathered from 241 employees affected by the Act. The potential for success or failure of the Merit Pay System is discussed, indicating several problems with the program.

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Merit Pay as a Motivator in the Federal Sector

by

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BSEE, University of Cincinnati, 1971

Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

The Civil Service Reform Act of 1978 required the implementation of the Merit Pay System for a portion of the Federal civilian workforce as a means of increasing productivity through the use of monetary incentives. To test the validity of this concept, several theories of worker motivation are reviewed and their relation to money motivation and pay-for-performance is established. These relationships are compared to the results of data gathered from 241 employees affected by the Act. The potential for success or failure of the Merit Pay System is discussed, indicating several problems with the program.

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I. INTRODUCTION

Motivation and the effective utilization of people in organized human effort are subjects which continually remain high on the list of managerial interests. All men have purposes, and these purposes affect the way they work. Understanding these purposes and finding ways to allow the organization and the worker to achieve their respective goals simultaneously is the issue. Since the 1920's there has been an endless stream of literature on the subject. It is an important subject since motivation is a key to productivity and productivity can make or break an organization, whether in the public or private domain. Of course, productivity is a function of more than motivation, being influenced by individual skills and abilities, but motivation is certainly an important factor.

The theories and concepts of motivation have become considerably more sophisticated than the early principle of hedonism where the central assumption was that behavior was directed toward pleasure and away from pain, but there is still considerable diversity in methods and implementation. For this paper a generalized approach will be taken, looking at several theories and their associated assumptions about the nature of man, and what motivates man in the workplace. These theories will then be related to the use of money as a

motivational device, with particular interest toward pay-for-performance, or merit pay programs. The latter are of primary interest because the Civil Service Reform Act of 1978 required the introduction of a merit pay system for high grade management and supervisor personnel in the Federal workforce. The objective of this paper is to relate money to motivation and to assess the value of pay-for-performance as a stimulus to increased productivity. Although a number of motivational theories and ideas will be discussed, the central aim of the paper will be an analysis of the motivational value of a portion of the Civil Service Reform Act known as the Merit Pay System.

A. SCOPE AND LIMITATIONS

Although the Civil Service Reform Act mandated the introduction of the Merit Pay System throughout the Federal sector, this paper will be restricted to the system as implemented by the Department of the Navy. This system is basically a management by objectives program with money offered as a reward for successful objective achievement. The paper will attempt to relate the use of money motivation, through merit pay programs, to changes in employee satisfaction and productivity, as predicted by the literature. The analysis will be augmented by the discussion of the results of survey data taken from a number of Department of Navy civilian employees covered by the Merit Pay Program.

B. BACKGROUND: THE CIVIL SERVICE REFORM ACT OF 1978

The product of candidate Jimmy Carter's campaign pledge to improve the efficiency of the Federal government was the Civil Service Reform Act of 1978. The act had administrative as well as legal impacts, eliminating the Civil Service Commission and replacing it with three new agencies, the Office of Personnel Management, the Merit Pay Protection Board, and the Federal Labor Relations Authority. Two major objectives of the act were: "to provide the people of the United States with a competent, honest, and productive workforce reflective of the Nation's diversity, and to improve the quality of public service, Federal personnel management shall be implemented consistant with merit system principles and free from prohibited personnel practices" and "in appropriate instances, pay increases shall be based on quality performance rather than length of service" [Ref. 1]. The Act provides for the establishment of a Performance Appraisal System which encourages employee participation in establishing performance standards and for the use of "results of performance appraisals as a basis for training, rewarding, reassigning, promoting, reducing in grade, retraining, and retaining employees" [Ref. 2].

Prior to enactment, the general schedule (GS) of the Federal workforce consisted of eighteen pay grades each having ten steps, or pay levels, within each grade. Employees in a grade could advance through the steps based

upon length of service and acceptable performance (denial of a step increase was a very rare occurrence). Additional step advances in the form of Quality Step Increases could be paid to outstanding employees. The Act established the Senior Executive Service for GS-16, 17, and 18 general schedule and Level IV and V executive schedule employees to "ensure that the executive management of the government of the United States is responsive to the needs, policies, and goals of the Nation and otherwise of the highest quality" [Ref. 3]. Additionally it provided for a compensation system designed to attract and retain highly competent senior executives. The Senior Executive Service employees are under a bonus-oriented system, with set salary levels and lump-sum awards of up to 20 percent of one's salary.

With the top grades moved to the Senior Executive Service, the number of grades in the general schedule was reduced to fifteen with the same ten-step structure. For supervisory or management officials in GS-13, 14, and 15 positions, the Act established the Merit Pay System. The stated purposes of this system are [Ref. 4]:

1. Within available funds, recognize and reward quality performance by varying merit pay adjustments.
2. Use performance appraisals as the basis for determining merit pay adjustments.
3. Within available funds, provide for training to improve objectivity and fairness in the evaluation of performance.

4. Regulate the costs of merit pay by establishing appropriate control techniques.

For employees covered by the system, the method of computation of the annual pay increase was modified to allow merit pay adjustments based in part on the employee's performance appraisal. The step structure is eliminated and a pool formed to fund these merit pay increases with money from three sources: the funds normally paid through step increases, funds normally paid for Quality Step Increases (the amount being based on statistical data), and one-half of the annual comparability pay increase, the annual comparability increase being similar to a cost-of-living increase granted in the private sector. A somewhat complicated formula incorporating both level of performance and pay grade is used to divide this pool of money into individual pay increases. In addition to these merit increases, the Act allows for the payment of cash bonuses to employees who are at the top of their pay range. For Merit Pay System employees, total annual pay increases are now based on two factors: a minimum of one-half of the general schedule comparability increase, and the merit increase based on the employee's share of the pool.

This brief overview of the Act as it applies to pay administration changes was presented to give some background and establish some terms to be used later.

C. THE PLAN OF THE PAPER

The paper will start with a look at the beginnings of management theory to give a framework for later management thought. This will be followed by a discussion of the three major approaches to motivation and their assumptions about the nature of man at work. Contrasts will be drawn between these approaches, and their value in a pragmatic management philosophy will be discussed. Next, discussions of the value of money as a motivator and merit pay programs and their value as a motivational device will be offered. A critique of the value of merit pay systems in the Federal environment and a discussion of the survey data will follow. Finally, conclusions as to the value of the Navy's Merit Pay System will be presented.

II. THE BEGINNINGS OF MANAGEMENT THEORY

Since earliest history, when two or more individuals have engaged in some productive effort, there has always been a tendency for a leader, either formal or informal, to emerge. As work units became large, the function of the leader became more important, and organizational structures were developed to attempt to manage workers in an efficient way. Few early management efforts were founded in theory and principle, relying instead on fear and heavy-handed force to achieve management's goals. There were of course exceptions; one of the earliest records of incentives being offered for extra productivity is that of Nebuchadnezzar in 604 B.C. where extra food was allotted to individuals who made special accomplishment in spinning and weaving [Ref. 5]. To gain a better perspective on the discussion of motivation to follow, a short review of the beginnings of management theory will be offered. It is by no means comprehensive, but does offer a flavor of the awakenings and progress of early management thought, beginning with classical ideas.

A. CLASSICAL MANAGEMENT THEORISTS

The industrial revolution brought the first systematic experiments with softer management approaches. These first experiments were aimed at extrinsic motivation. They were

few in number and did little to start a general movement, since labor was still plentiful and wages were so low as to offer little concern to the factory owners.

In 1800, James Watt and Matthew Boulton were unique in their management of the Soho Foundry. They paid incentive wages based on a price-rate system, established an insurance society for their workers, and were the first to recognize the effects of a clean environment on productivity [Ref. 6].

As one of the forerunners of scientific management, Robert Owen recognized the value of the human factor in several cotton mills he managed at New Lanach, Scotland in 1810. Owen saw management's role as one of reform. He reduced the length of the standard work day and refused to hire childlabor under age ten. During this period child workers of 5 or 6 years were common. He built housing for his workers and operated a company store where goods could be purchased at fair prices. Owen was paternalistic in his views and labor practices. He felt that improved working conditions would inevitably lead to increased productivity and profits, preaching that money spent on employees could have a much higher return than that spent on machinery [Ref. 7]. In the mid-1800's Henry R. Towne, president of Yale and Towne, designed a profit sharing plan to dispense profits above a specific level as an addition to employee wages. At the time of its introduction it was a revolutionary idea.

Charles Babbage contributed to these early efforts through his study of factory operations and his advocacy of the division of labor principle. His contributions were not directly related to worker motivation, but toward increased worker efficiency through skills improvement [Ref. 8].

A shortage of labor at the beginning of the twentieth century fostered increased interest in scientific management to meet the need for increased productivity. During this period Fredrick Taylor published two books, Shop Management and The Principles of Scientific Management and earned himself the title of "Father of Scientific Management" [Ref. 9]. He introduced management principles and wage incentive plans designed to both assist and encourage workers to produce beyond their nominal potential. He emphasized work methods improvement and economic rewards for better than average performance. He defined management as "a true science, resting upon clearly defined bases, rules, and principles as a foundation" [Ref. 10]. Taylor merged his years of experience as both worker and manager into a philosophy which advocated the development of a true science of management, the scientific selection of workers, the scientific education and development of the worker, and intimate, friendly cooperation between management and labor [Ref. 11].

Taylor had to contend with opposition from both workers and unions who feared that if they worked too fast and increased efficiency too much, some of their jobs would be

eliminated. His methods did dramatically increase productivity and led to higher pay in many instances, but the resistance continued. In 1912, resistance to his methods and principles caused a strike at the Watertown Arsenal in Massachusetts. Because of the strike he was called to Congress to explain his ideas and techniques. He testified that in order for his philosophy to succeed management as well as labor thought needed a "complete mental revolution." He went on to call for a stop to the quarrelling over profits and a combined effort to increase productivity. He felt that if this were accomplished, profits would increase to such an extent that labor and management would no longer have to compete for them [Ref. 12].

Another contributor to classical management theory was Henry L. Gantt, a collaborator with Taylor, who modified Taylor's differential price system by giving each worker a fixed bonus for meeting the daily work standard. A further modification included a bonus for the foreman for each worker who met the standard, thus motivating both the employee to work harder and the foreman to insure his workers were trained in efficient methods.

Also included are the Gilbreths, Frank and Lillian. Their primary contributions were in the areas of worker fatigue and motion studies. By determining the most economical motions for each task, they were able to increase performance and reduce fatigue. In addition, they developed

a three-position plan of promotion wherein a worker was simultaneously training his successor, doing his present job, and preparing for the next higher one. Thus a worker could constantly look forward to promotion and avoid dead end jobs [Ref. 13].

And finally, Henri Fayol must be acknowledged as the founder of the classical management school, being the first to systemize managerial behavior. A Frenchman, he spent his career in the French coal and iron mining industries. His insistance that management was not a personal talent, but a skill to be learned like any other was a major contribution to management thought.

The classical theorists began the movement toward management as a science, but they dealt almost exclusively with the external conditions of the work environment. It was left to the human relations theorists to continue in the spirit of Robert Owen and make an effort to utilize the human element to its full extent.

B. THE HUMAN RELATIONS SCHOOL

Social scientists began working in the management area in an attempt to fill the gap left by classical theorists in the achievement of production efficiency and workplace harmony. The classical approach relied on rational patterns of behavior, and when workers did not act predictably, it failed. These social scientists attempted to look at the

human side of organizations and align the worker's personal goals with those of the organization. The movement was away from the view that workers were all cast in McGregor's [Ref. 14] Theory X mold, and toward a view that acknowledged the worker's complex sociological and psychological needs. Hugo Munsterberg was the first to advance the interaction between psychology and industry. He saw psychologists in industry as helping productivity in three ways [Ref. 15]:

1. By identifying and matching the worker with the best mental qualifications for a specific job.
2. By creating the best psychological work conditions.
3. Through the use of psychological influences to motivate workers.

Munsterberg's work had little impact at the time, but he set the stage for the findings of the experiments being conducted at the Hawthorne Works of Western Electric in Chicago.

The Hawthorne Experiments were carried out by Elton Mayo and his associates from 1927 to 1932. The experiment started with an investigation of the relationship between work-area lighting and productivity. Mayo was called in when the original researchers discovered what they considered to be rather peculiar results, namely that productivity increased whether the work area light level was increased or decreased. Mayo perceived that "the human reactions of people engaged in productive work have a much more important effect on their morale and efficiency than had previously been realized" [Ref. 16]. Experimenting with a test and a

control group, Mayo discovered that it was the special attention paid to the groups that increased productivity rather than the change in working conditions. The phenomenon became known as the Hawthorne effect. The researchers determined that informal work groups have a great influence on productivity. The social environment of these groups transmitted significant meaning to the employees' lives, and group pressure had a stronger influence than management's demands on productivity. He concluded that if management can turn these socially satisfying informal groups into positive, productive forces by providing employees with a sense of being appreciated, they could maximize productivity [Ref. 17].

Mayo's pioneering work was the first to view the social environment as being influential in determining the quality and quantity of work produced. The work also pointed to the importance of management style and the need for people-management skills in an effective organization.

C. SUMMARY

The classical theorists and the human relations school laid the groundwork for a movement to the behavioral science approach to be discussed in the next chapter. As will be seen, the classical theories evolved into an approach known as the "rational-economic man" and the human relations school evolved into the "social man" approach. Neither school

completely described the individual in the workplace, but were the beginners, and provided a stable foundation for the later work of men like Argyris, Maslow, and McGregor.

III. MOTIVATION IN THE WORKPLACE

There is no single theory or strategy that will keep morale and productivity high for all workers [Ref. 18]; with this in mind, several approaches to motivation will be presented. As was discussed in the previous chapter, the classical theorists relied on wage incentives, offering extra pay for increased productivity. They were effective to a point, but as efficiency increased, fewer workers were needed and lay-offs resulted. The reaction was to slow down the work pace to insure job security. The human relations theorists stressed psychology and the social aspects of the workplace. Under both theories, workers were expected to accept management's goals and authority because they were offered either money or consideration and attention. This chapter will look at contemporary thinking about motivation and the ways in which these early theories have been modified and refined. Three approaches to motivation will be discussed beginning with the rational-economic man.

A. THE RATIONAL-ECONOMIC MAN

This approach is in the same vein with classical thinking. Employees are expected to do no more than the organizational control system encourages through the use of incentives. An abnormal employee wanting to do more is soon

conditioned to fit the pattern through lack of additional incentive. Schein [Ref. 19] lists several assumptions about the nature of man in this approach. These assumptions are:

1. Man at work is primarily motivated by economic incentives.

2. Since economic incentives are under the control of the organization, man is therefore a passive agent to be manipulated, motivated, and controlled by the organization.

3. Man's feelings are essentially irrational and must be prevented from interfering with his rational calculations of self-interest.

4. Organizations can and must be designed in such a way as to neutralize and control man's feelings and therefore his unpredictable traits.

Thus, an organization faced with low morale and/or low productivity, could take one of the following actions [Ref. 20]:

1. Improve overall effectiveness by redesigning job and organizational relationships.

2. Re-examine its motivation and rewards incentives plan.

3. Re-examine its control structure to determine if supervisors are putting enough pressure on workers to produce, or if the system is adequate for identifying and punishing slackards on the job.

When a manager assumes that he can deal with his employees with the rational-economic approach, he has embraced the ideas associated with McGregor's Theory X [Ref. 21]. These ideas can be stated as follows:

1. The average human being has an inherent dislike of work and will avoid it if he can.

2. Because of the human characteristic of dislike of work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth

adequate effort toward the achievement of organizational goals.

3. The average human being prefers to be directed, wishes to avoid responsibility, has little ambition, wants security above all.

The approach implies that man is "controlled" into working through the use of economic incentives. The employer is buying the services and obedience of the employee for economic rewards. Monetary incentives are one of the pillars of the rational-economic man approach. Under these assumptions, managerial strategy lies in efficient task performance where the four principle functions a manager must perform are to plan, organize, motivate, and control [Ref. 22].

Organizations which use this approach are bureaucratic in nature, based on a hierarchical structure with emphasis on legalized, formal authority. Max Weber [Ref. 23] viewed bureaucratic organizations as an apparatus of abstract depersonalization, capable of attaining the highest degree of efficiency, and the most rational known means of carrying out imperative control over human beings. The approach uses a strong system of authority and controls. Authority rests essentially in designated offices or positions, and employees are expected to obey whoever occupies the position of authority. The burden for organizational performance falls entirely on management and its use of monetary incentives.

Most examples of the rational-economic man assumptions in action would be in the concept of an assembly line or piece-rate production activities. Money and individual incentives have proven to be successful motivators of human effort in these kinds of organizations. One problem which should be anticipated is that if money is the only thing the workers can expect from an organization, they will want more of it. Since it is the only issue with which they can bargain, they will likely form a union to use it effectively. Lawless [Ref. 24] observes that at worst, the theory views the individual as untrustworthy, money-motivated, and calculating, except for those self starters who should manage the former. At best, the theory makes the worker a rather dull clod not knowing how to do things in his own interest without some direction and incentive, primarily monetary. Argyris [Ref. 25] observes that this theory will produce and reward apathy, indifference, alienation, and non-involvement.

As industrial psychologists entered the picture and began to study motivators, it became clear that workers had needs and motives that did not fit the rational-economic model. These studies led to the next model for consideration, the social man.

B. THE SOCIAL MAN

It was the work of Elton Mayo during the Hawthorne studies that disclosed the existance of a motivational

approach which differed from incentive motivation. He and his colleagues found a strong need for social involvement and a resistance to being put in a competitive position with other workers. Mayo listed four assumptions regarding the social needs of man relative to motivation [Ref. 26]:

1. Man is basically motivated by social needs and obtains his basic sense of identity through relationships with others.

2. As a result of the industrial revolution and the rationalization of work, meaning has gone out of work itself and must therefore be sought in the social relationships on the job.

3. Man is more responsive to the social forces of the peer group than to the incentives and controls of management.

4. Man is responsive to management to the extent that a supervisor can meet a subordinate's social needs and his needs for acceptance.

Management under these assumptions acknowledges the social and human needs in the job, opening the door to a psychological contract between the employee and the organization, in which each can expect much more of the other [Ref. 27].

A later study conducted by other Harvard researchers [Ref. 28] found that Mayo's assumptions were valid. This study found:

1. Worker productivity and job satisfaction were related to their membership in the work group and not to the pay and job status which the individual received.

2. Those workers who were regular members of a work group tended to be satisfied and to conform to group norms of productivity and to management's expectations.

3. Workers who isolated themselves from a work group tended to be less satisfied and to violate group norms.

4. Deviates and isolates who aspired to group membership and who identified with the group tended to produce below the group's norms.

5. Deviates and isolates who did not aspire to group membership tended to produce above the group's norms.

Thus the existence of informal groups and the formation of a social environment is viewed as an important factor in worker satisfaction and productivity. Roethlisberger [Ref. 29] writing alone observes that a worker is not an isolated, atomic individual, but rather is a member of a group or several groups. He adds that these groups have their own informal codes of behavior and their own sentiments through which the behavior of their members is regulated and controlled. The informal groups are important in an organization and are manifestations of a healthy work environment. Without them the organization is too sterile, and employees are deprived of the feeling of security and belonging that adds significance to their lives. Roethlisberger [Ref. 30] cites the important need for tangible evidence of an individual's social importance; the need to have a skill that is socially recognized as useful, and the feeling of security that comes not so much from the amount of money we have in the bank as from being an accepted member of a group. He likens a man whose job is without social function, as a man without a country. The activity to which he has given the major portion of his life is robbed of all human meaning.

In many ways the values and codes of conduct of the informal group have as much or more influence than those of the formal organization. Members of these groups are evaluated by their peers just as formal evaluations are performed by the organization, and these group evaluations may have more to do with job motivation than the former. The sentiments underlying the evaluations made by the informal organization are often very powerful determinants of human behavior. The result may be that a worker feels worse to be judged a "rate buster" by his fellow workers than to be judged a "poor worker" by his supervisor. And he may behave accordingly [Ref. 31].

The strength of the informal groups within any organization is dependent to a large degree on the type of supervision exercised. Rensis Likert separates supervisors into two types: those who are employee-centered and those who are production or job-centered [Ref 32]. The employee-centered supervisor, as the title indicates, is more concerned about his subordinates than about their level of production. This is not to say that he does not view production as important, only that his method of attaining it is different. He concentrates his attention on the human aspects of his subordinates' problems and attempts to work with them and to build them into a smooth-functioning team. The job-centered supervisor tends to consider his subordinates as being Theory X type individuals who have to be told

exactly what to do and when to do it. He manages to production levels and pushes his workers through an impersonal routine designed to give high productivity and pays little or no attention to the social atmosphere of the organization. By not recognizing the social needs of his employees, the job-centered supervisor is headed for trouble according to Argyris [Ref. 33]. He observes that when the social needs of employees are stifled by the formal organization, the informal organization becomes stronger. Denied legitimacy, the informal group takes on new importance, and it can easily and effectively restrict production.

If management wants to insure that it is satisfying the social needs of its employees, the following strategies might be followed [Ref. 34]:

1. A manager should not limit his attention to the task to be performed, but should give more attention to the needs of the people who are working for him.

2. Instead of being concerned with motivating and controlling subordinates, the manager should be concerned with their feelings, particularly their feelings in regard to acceptance and sense of belonging and identity.

3. The manager should accept work groups as a reality and think about group incentives rather than individual incentives.

4. The manager's role shifts from planning, organizing, motivating, and controlling to one of acting as an intermediary between the men and higher management, listening and attempting to understand the needs and feelings of his subordinates, and showing consideration and sympathy for their needs and feelings. The manager, instead of being the creator of work, the motivator, and the controller, becomes the facilitator and sympathetic supporter.

There is strong evidence that the assumptions of the social man are consistent with fact. In contrast to the rational-economic assumptions, Whyte [Ref. 35] found that among production workers the proportion who are primarily motivated by monetary incentives is low. Perhaps as few as 10 percent of workers respond to an individual incentives scheme and ignore group pressures to restrict output. This is an indication of the strength of the informal group. Seashore [Ref. 36] found that high cohesiveness was associated with high production if the group members had a high confidence in management and with low production if the group members had low confidence in management. This again shows the degree to which the social interactions of the informal group can control a situation and points up the fact that management needs to foster good relations with them.

Whyte in another study [Ref. 37] showed that absenteeism, job quitting, and customer service in the restaurant industry are related to social and group factors; if the groups were well knit, good relations and high quality work were present.

On the counter side, Lawless [Ref. 38] states that a weakness in the psychological contract is that the worker is permanently bound to a parent-child relationship with the organization. The parent is benovolent, but the child never reaches maturity. He goes on to argue that too much of the social man approach reduces a worker's ability to stand on

his own two feet and may be the cause of the huge welfare state and associated social attitudes of today.

With these successes and shortcomings in mind, the third approach is presented.

C. THE SELF-ACTUALIZING MAN

This view is based upon the work of a number of observers. Maslow, McGregor, Argyris, Herzberg, and others see a serious problem in the fact that most jobs in modern organizations are so specialized that they do not permit the worker to use his capabilities, nor enable him to see the relationship between what he is doing and the total organization mission. Maslow views human motivation in terms of a hierarchy of five needs which may be categorized as follows [Ref. 39]:

1. Physiological needs. (The need for air, water, food, and sex)
2. Security needs. (The need for safety, order, and security)
3. Social needs. (The need for love, affection, feelings of belonging, and human contact)
4. Esteem needs. (The need for self-respect, self-esteem, achievement, and respect from others)
5. Self-actualization need. (The need to grow, to feel self-fulfilled, and to realize one's potential)

Maslow indicated that an individual will be motivated to fulfill the need that is most powerful for him at a given time. Starting with the most basic, the physiological, each need must be at least partially satisfied by the individual before

he moves up the hierarchy to the next stage. Most present day organizations fulfill the physiological and security needs satisfactorily, leaving management to attend to the upper level needs. The social needs are those already mentioned. The higher level needs can be fulfilled through a process of participative management in which employees are provided feedback, recognition, and involvement in goal setting and decision making. Self-actualization may manifest itself in a number of different ways. For some employees it may be producing high quality work such as a fine piece of furniture, while for others it may be developing a creative idea.

Schein [Ref. 40] adds several assumptions about the nature of man which he sees as applying to this approach. These are:

1. Man seeks to be mature on the job and is capable of being so. This means the exercise of a certain amount of autonomy and independence, the adoption of a long-range time perspective, the development of special capacities and skills, and greater flexibility in adapting to circumstances.

2. Man is primarily self-motivated and self-controlled; externally imposed incentives and controls are likely to threaten the person and reduce him to a less mature adjustment.

3. There is no inherent conflict between self-actualization and more effective organizational performance. If given a chance, man will voluntarily integrate his own goals with those of the organization.

These assumptions are in line with the assumptions made by McGregor [Ref. 41] when he proposed that a more realistic

picture of man than Theory X could be drawn if the assumptions of Theory Y were used. Theory Y assumes the following:

1. The expenditure of physical and mental effort in work is as natural as play or rest. The average human being does not inherently dislike work. Depending upon controllable conditions work may be a source of satisfaction or a source of punishment.

2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.

3. Commitment to objectives is a function of the rewards associated with their achievement. The most significant of such rewards, e.g., the satisfaction of ego and self-actualization needs, can be direct products of effort directed toward organizational objectives.

4. The average human being learns, under proper conditions, not only to accept but to seek authority. Avoidance of responsibility, lack of ambition, and emphasis on security are generally consequences of experience, not inherent human characteristics.

5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.

6. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.

McGregor then, sees man as not being limited by human nature but by the lack of ingenuity of the organization. Man will expand to fill any requirement given the proper environment.

Fredrick Herzberg and his associates conducted attitude studies which identified a number of factors which added to or detracted from work satisfaction. The studies [Ref. 42] involved two hundred engineers and accountants who were asked

to identify times they felt very good and very bad about their jobs. Herzberg identified two sets of factors which he called satisfiers and dissatisfiers. He classified the satisfiers as motivating factors and the dissatisfiers as "hygiene" factors. The satisfiers included achievement, recognition, responsibility, and advancement indicating that employees were motivated by higher order needs in agreement with Maslow. The absence of these factors had little to do with employee dissatisfaction. The dissatisfiers included salary, working conditions, and company policy. The lack of these factors caused employee dissatisfaction while their presence did not mean job satisfaction. Herzberg saw the satisfiers as related to job content and the rewards that resulted directly from performance of work tasks. The dissatisfiers came from the individual's relationship to the job context or environment. The conclusion to be drawn from this is that man can be motivated to higher productivity by the nature of the work and the feelings of achievement that go with the performance of meaningful tasks, with no need for other extrinsic incentives. Man may be motivated by simply allowing him to use his skills and capacity in a natural way. A manager attempting to motivate in this way is less concerned about being considerate to employees and more about how to make their work intrinsically more challenging and meaningful. The issue is not whether the employee can fulfill his social needs, but rather if he can find in his work

meaning which gives him a sense of pride and self-esteem [Ref. 43].

Evidence to support this concept can be found in the ingenuity of workers to create fantastic gadgets to make their work easier, or their involvement in complicated means designed to foil, fool, and frustrate management. Argyris studied various kinds of manufacturing operations and found that if the job itself frustrated an employee by being too limiting or meaningless, he will create meaning and challenge in outwitting management or in banding together with others in groups [Ref. 44]. In many cases the activities involved in injecting meaning into a job may require more effort than the work itself.

There is some question as to whether self-actualization can occur at all levels of the organization, a problem cited with redundant, assembly type work. The answer seems to be that if a worker cannot self-actualize on the job he may use the job to earn enough money to do so off the job during leisure hours. This is an indication that money can be of use, even with the sophistication of self-actualization. As Gellerman points out, money is only a symbol, meaning whatever people want it to mean, and therefore reflects the ambiguity of focuses and emotional nature of man. It is only when money becomes a credible vehicle for achieving security, station, and the intangible goals that it can begin to symbolize them. And it is only when money symbolizes these

goals that it begins to acquire significant motivating power [Ref. 45].

D. SUMMARY

In the first two approaches to motivation, the rational-economic and social man assumptions, the emphasis is on extrinsic means. The organization does something to arouse motivation and the psychological contract involves the exchange of economic or social rewards for performance. In the self-actualization approach, the means are intrinsic in that the organization provides an opportunity for the employee's motivation to be harnessed to the organization's goals. Here the contract involves the exchange of opportunities to allow satisfaction for accomplishment and the use of one's capacities for high-quality performance and creativity. Although each set of assumptions becomes more sophisticated, all three tend to be generalized and simplified concepts of man. Man is more complex than any of them. Additionally, man is highly variable; he has many motives which are arranged in some sort of hierarchy of importance and subject to change from time to time and situation to situation. Man is capable of learning new motives which may change these patterns of motivation and psychological contract. The nature of the task, the abilities and experience of the person on the job, and the nature of fellow workers and others in the organization all interact to produce a

certain pattern of work and feelings. The conclusion to be drawn is that there is no one correct management strategy that will work for all men at all times. The successful manager must be a good diagnostician and must have an inquiring spirit. Each of the approaches will likely be correct for some situation, and the manager must remain flexible, read the situation, and be ready to accept a variety of interpersonal relationships, patterns of authority, and psychological contracts.

IV. MONEY, MOTIVATION, AND MERIT PAY

The previous chapter presented three approaches to motivation. This chapter will look at the value of money as a motivator, paying particular attention to its use in pay-for-performance, or merit pay programs. Stated simply, the purpose of these programs is to reward good performance with increased salary, and in theory thereby motivate the person to continue or improve performance. As was pointed out in the previous chapter, money may or may not be an effective motivator, depending on a number of circumstances. It was found to be somewhat useful in early motivation programs such as Taylor's differential pay incentives plan. However, Whyte found that as few as 10 percent of workers respond to individual incentives and ignore informal group norms of behavior, when a strong social environment has developed. Schein, in his assumptions concerning the self-actualizing man, cautioned that externally imposed incentives can threaten the person and cause him to be less mature. Thus, the question requires further study before any motivational value for money can be determined. First, the literature concerning money motivation will be examined, followed by a look at merit pay systems.

A. MONEY AS A MOTIVATION

Money is probably the oldest and most commonly used incentive. It fits perfectly into classical management thinking and is a main pillar in the rational economic approach. Economists stress the exchange concept of money; money is valuable because it can be exchanged for goods and services [Ref. 46]. This is essentially the same view as cited by Gellerman earlier. In Maslow terms, money can completely satisfy some needs, such as the need for security, and may serve to fill the need for status, esteem and recognition as well. Money can provide a measure of success that is visible to all, wages being a common measure of success across society. One drawback to the reliance on money as the principle motivator is the loss of management control and a tendency for the worker to compromise quality in order to get the most money for the least effort [Ref. 47].

Several studies have looked at the value of money as a motivator. Herzberg and his colleagues [Ref. 48] reported that money was a "hygiene" factor and that wages were found to be the most frequent source of dissatisfaction, but the least frequent source of satisfaction, indicating a low value as a motivator. Opshal and Dunnette [Ref. 49] disagree with Herzberg on this point. Working with the same data they found the argument that money acts only as a potential dissatisfier "mystifying". Their analysis of the data showed that in describing good job feelings salary was mentioned as

a major reason for this feeling 19 percent of the time. In contrast, salary was mentioned as a major cause of unusally bad job feeling only 13 percent of the time. In a later study, Herzberg and his associates [Ref. 50] conducted a survey of 16 studies and found that pay ranked sixth in importance. A similar survey conducted by Lawler [Ref. 51] looked at 49 studies and found that pay ranked third overall and that in 14 of the studies, or approximately 28 percent, pay ranked first. Still another study [Ref. 52] revealed that out of 18 job related factors, salary was ranked twelfth in importance by a sample which had a representation of 60 percent management and professional workers. In a comment on self-actualization and money, Allen Mode [Ref. 53] observes that it is not evident that today's professional employees really consider self-esteem and self-actualization as their major goals in going to work. He adds that individual and group accomplishments can be self-fulfilling, but knowing that a measurable monetary reward will also be received is a significant motivation for most employees.

Evidence indicates that satisfaction is dependent on relative rather than absolute wage levels. According to the theory of equity advanced by Adams [Ref. 54], workers strive to attain an equitable relationship between job inputs and outcomes on their own jobs, and in equity with those of their fellow workers. A worker who believes that he is overpaid relative to others with the same inputs may try to

reduce the feelings of inequity and tension by increasing his inputs and his level of performance. Likewise, a worker who believes that he is being underpaid relative to others may reduce his inputs and level of performance. It should be noted that it is a perceived inequity, which may or may not be real, which causes this behavior. Adams argues that the inequity reduction only applies if employees are paid in accordance with the amount of time worked. If an employee, who believes he is overcompensated is paid on a piece-work basis, an increase in his productivity will increase the inequity. However, he may reduce the inequity by increasing the quality of his work to compensate. Vroom [Ref. 55] interprets these results as reflecting the fact that workers strive to maximize the equity of their wages and attempt to perform at a level which is most consistent with their concept of relative wages and qualifications of themselves and their co-workers.

The rational-economic assumptions would indicate that workers should attempt to maximize their economic return. This should be true where wages are directly related to the level of performance as in wage incentive plans. Viteles [Ref. 56] reviewed survey information from companies with wage incentive plans and found productivity did substantially increase following their installation. Vroom [Ref. 57] agrees with this observation. He cites a large number of investigations indicating that level of performance increases

as the expected relationship between performance and wages increases. He states that the positive value of money as a motivator is also supported by the finding that this effect is greatest for workers who responded that money is relatively important to them and that the effect is dependent not only on the amount of money involved, but on the extent to which it is believed to be deserved.

There is evidence [Ref. 58] that the value of money differs with social class. The findings indicate that rank-and-file workers are most concerned with extrinsic job factors and that people at the higher occupational levels are most concerned with intrinsic job factors. Another interesting and important finding is that there is a consistent increase in the importance of pay as level of social class decreases. This is also true for job security, while the importance of interesting work and freedom on the job increased as social class increases. These relationships may be explained by cognitive dissonance theory which indicates that an individual in a lower level job, with limited opportunities for autonomy and responsibility, may try to minimize his psychological discomfort by indicating to himself and others that intrinsic job factors are not as important as other job factors [Ref. 59].

Gellerman [Ref. 60] observes that money can motivate only when the increment that is in prospect is large enough relative to existing income. Most salary increase, bonus,

and profit-sharing plans do not provide an increment that is large enough to motivate any activity other than the purely passive action of staying in the organization. He observes further that these increases are usually not large enough to motivate extra effort or creativity, or any other kind of non-routine performance. That kind of motivation demands increments of a considerably greater order of magnitude than are usually available. As to the size of the increase needed to motivate, Gellerman observes that it must make a radical change in the individual's financial condition. It must be a change in order of magnitude, making possible things only dreamed of ordinarily and must change a person's capital position. In short, the amount must be large enough to change the individual's basic attitude toward money. As his final caution concerning critical size, Gellerman states, "Make no mistake about it--effective motivation with money is no piker's game" [Ref. 61].

The studies cited thus far have given money mixed reviews. It would appear that a number of factors must be taken into account when considering money as a motivator. As was previously indicated, money is more important to rank-and-file workers. For professional workers, salary was rated twelfth out of 18 factors, indicating as predicted the lower motivational potential as social class increases. And finally, there is the problem of critical amount that Gellerman has pointed out.

It would appear then, that money can be a motivator if used in a proper setting. An analysis of the setting should include a look at the intrinsic value of the work, the social class of the affected individuals, and the size of the budget available for rewards. As was pointed out earlier, a motivational strategy based on monetary incentives alone does not contain the required flexibility to meet dynamic situations, but money should be one of the options available. The next consideration is the best method for using money motivation. This leads to a discussion of merit pay.

B. MERIT PAY

Merit pay programs attempt to systematically tie pay increases to specific measures of performance. They are based on the law of effect, which states that behavior that appears to lead to a positive consequence tends to be repeated. Merit pay has been advanced as the efficient way to use money to motivate because the reward is linked to performance through a system of performance measures, and these measures are based on goals and objectives which are all interconnected with the overall organizational goals and objectives. In fact, the strong point to be made for merit pay is that it replaces subjective with objective, quantitative measures of performance. If a merit pay program is to be successful, it must meet two basic requirements. It is essential that a merit pay policy be built on a strong

performance appraisal system, and that after the completion of the appraisals, salary increases must be awarded as rewards for performance [Ref. 62].

In many instances the lack of clear communication within an organization accounts for most of its personnel problems. The prime success of merit pay programs is in their creation of a clear understanding of the purpose of the work, and the measures to be used in evaluating employee performance. Piamonte [Ref. 63] observes that many a manager would be surprised at how little similarity exists between what he considers the employee's job and how the employee sees it. Just because the results expected may be clear to the manager does not mean that they are clear to the employee, and no amount of motivation will move an employee in the desired direction if the employee does not know where that direction lies.

Because an efficient and effective appraisal system is a primary requirement, many merit pay programs are closely aligned with a process of management known as management by objectives (MBO). MBO was first applied by Peter Drucker [Ref. 64] as an approach to planning. Drucker saw MBO as an effective method for involving all levels of management in participative planning through the integration of objectives for their individual positions into, and supporting, the objectives of the organization as a whole. McGregor [Ref. 65] favors MBO's value as a performance appraisal system, allowing

employees and their supervisors to set performance objectives for a period, setting a specific plan for goal achievement, and providing feedback via an appraisal at the end of the period. He feels that this means of adding objectivity to the appraisal system should remove the subjectivity and ambiguity normally associated with an appraisal process.

MBO and merit pay systems are in wide use in the private sector, particularly for management positions, commonly referred to as exempt positions (professional, administrative, and technical). As to the extent of use of MBO by industry, a survey of the top 500 companies in the United States indicated that 45 percent of the 403 who responded to the questionnaire stated that they had an MBO program. However, only 19 percent were rated as successful [Ref. 66]. Several reasons for this lack of success will be discussed below, but one potential problem with the MBO process in general should be mentioned. Stimson [Ref. 67] cautions that meeting the objectives may become an end in itself. He relates the experience of Sears Roebuck and Company and their development of a compensation bonus plan for 900 managers. The plan emphasized volume gains rather than gross profit performance. Managers interpreted this as a mandate to increase sales even if it meant selling at a low profit margin. Sales boomed, but quarter profits dropped by 36 percent.

Many of the failures of pay-for-performance programs stem from problems of employees not being able to perceive a

direct relationship between pay and performance. Lawler [Ref. 68], in discussing the common failures of merit pay systems, cites the following areas as contributing to this problem:

1. Poor performance measures. They must be objective, comprehensive measures of performance; subjective managerial judgment will not do and is viewed as invalid, unfair, and discriminatory. Without good objective measures, it is impossible to relate pay to performance.

2. Poor communications. Salary and pay practices must be brought into the open in clear, understandable language.

3. Poor delivery systems. Complex procedures to administer small changes in base salary are typical. A bonus system might be better. By modifying the base salary, as opposed to a bonus system, an employee can continue to receive merit pay even if his performance has declined for several years.

4. Poor managerial behavior. A reluctance on the part of managers to make full use of the program by recommending small and large increases when they are deserved. Managers are reluctant to give accurate ratings, particularly on the low side, because of the flack they might catch.

He goes on to cite several of the obstacles that threaten merit pay programs. They are:

1. Inflation. Cost-of-living increases are given across-the-board and this fails to relate pay and performance, distorting the intended clear relationship.

2. Organizational size. In large organizations many jobs are not directly related to the bottom line which presents problems in determining clear performance goals and measures.

3. Products and service organizations. It is difficult to find quantitative measures in service sectors which use process technology.

4. New organizational structures. The wave of matrix organizational structures makes it more difficult to measure the performance of individual workers.

5. Benefits growth. Compensation dollars that could be spent on merit pay are spent instead on fringe benefits, another weakening of the link between pay and performance because the cash isn't available to reward exceptional performance.

6. Performance appraisals. When objective measures are not available workers are dissatisfied with performance appraisal systems' inability to yield valid measures.

7. Mistrust of large organizations. Mistrust of management and mistrust of the rewards systems of our society are on the rise.

Farmer [Ref. 69] makes several points concerning viable merit pay systems. He echoes Lawler in calling for open communication of compensation information. This allows each employee to know how his merit increase compares with increases received by his peers. Job descriptions should be kept current with a well publicized evaluation system, and he sees a good performance appraisal system as a prime requirement. He adds further that outstanding performers should receive salaries that are 40 to 50 percent greater than the minimally satisfactory employee and at least 20 percent higher than the average employee. And finally, merit pay should be decoupled from longevity to separate and reward current performance.

Hamner [Ref. 70] makes a criticism of the use of merit pay on the grounds that it utilizes externally mediated rewards rather than focusing on a system in which individuals can be motivated by their jobs. That is, employees who enjoy

their jobs, who are intrinsically motivated, will lose interest when a merit pay plan is introduced because they regard job satisfaction as their primary goal.

Hills [Ref. 71] sees several problems with the merit pay concept. In a criticism similar to Hamner's, he argues against pay-for-performance in general by stating that it may be dysfunctional because high performers not only receive more pay, but also get the management development opportunities. He adds that pay-for-performance on intrinsically rewarding work may actually decrease employee satisfaction with the work, resulting in lower motivation and performance. He makes several other constructive observations, adding his voice to the call for open communication of pay raise information and an effective evaluation system. Additionally he recognizes the problem of pay range limitations, which place a pay "cap" which cannot be exceeded. A manager may not want to give an outstanding performer an increase which will take the employee to this "cap", and leave the manager with no incentive to offer for next year. A good employee, at the top of his range, places the system in an awkward position if he is a high performer with no chance for advancement in the organization at the present time. Hills agrees with Lawler that a possible solution is a bonus system rather than the modification of base pay. He also recognizes the inflation problem and the tendency to give across-the-board increases just to keep real wages under

control, tending to dilute and muddy the clear relationship of pay and performance. A possible solution to this problem could be a separate time of the year for granting cost-of-living increases and merit pay increases. And finally he points to the problem of the size of the merit pay increase and its ability to be a true motivator. Piamonte [Ref. 72] cites the low value of merit increases as one of the primary reasons that merit pay systems are seldom successful. He offers the example of an employee earning $2000 per month who is in effect told that if he works twice or three times as hard, he will get a five percent increase, or $2100 per month. The "stakes", after taxes, are nominal. There is additional evidence echoing Gellerman's critical increase size requirement and indicating that increases of 20 to 30 percent may be required to give significant motivation [Ref. 73].

Hamner [Ref. 74] adds to the call for better communications, particularly with regard to employee performance, citing research which has shown that the more frequently formal and informal reviews of performance are held, and the more the individual is told about the reasons for an increase, the greater his preference for a merit increase system, and the lower his preference for a seniority system. On Lawler's point of poor management behavior, Hamner poses a question to managers to test their effective use of merit pay: Could I lay off managers based on their last merit pay

increase--that is, if I had to reduce my managerial staff by 10 percent, could I identify these people by their last performance appraisals and merit increases? He goes on to advocate five criteria to make merit pay systems work:

1. Openness and trust should be stressed by the compensation manager.
2. Supervisors should be trained in rating and feedback techniques.
3. Components of the annual pay increase should be clearly and openly specified.
4. Each organization should custom tailor its pay plan to the needs of the organization and individuals therein--with participation a key factor in the merit pay plan design.
5. Don't overlook other rewards.

Adams [Ref. 75] sums up the good aspects of merit pay programs and the accompanying appraisal systems by stating that merit ratings indicate the degree of efficiency of employees on specific jobs within a given classification; it appraises the characteristics and performance of employees. It keeps managers from passing superficial judgments on their employees. Forced to make objective ratings, they discover strong points in a person they had overlooked previously. He adds that employees probably work harder and strive for improvement when they know someone is going to rate them and someone will put down in black and white judgments relative to their performance.

C. SUMMARY

Money has been shown to be a motivator of increased productivity whose degree of success is a function of a number of factors including social class, the intrinsic value of the work, perceived equity, and the size of the monetary incentive. Merit pay has been shown, at least in theory, to be a good device to link pay and performance if it is used properly. However, a number of obstacles can hinder a successful program. The primary obstacles are the lack of a performance appraisal system with valid measures, and as above, a monetary incentive of too small a size to elicit more than passive response. There is evidence that the size of the monetary incentive needed may have been overstated. Stimson [Ref. 76] cites the work of Edwin Locke, a behavioral psychologist at the University of Maryland, which indicates that the setting of goals is more conducive to goal accomplishment than monetary incentives. Locke concluded that when goals are set and accepted, the level of performance is as high as when incentives are provided. Stimson adds however, that other researchers take issue with Locke's findings, contending that Locke dealt with small incentives that had little potential to motivate, a return to the original problem. It is not clear at this point whether a bonus system, to give lump sum awards, is more successful than a system which modifies base salary.

Several other pitfalls come to mind in considering merit pay programs. The avoidance of difficult goals is a potential problem as is insurance that goals of equal challenge will be selected across an organization. And although it appears to be desirable, the total reliance on measurable goals can exclude some subjective aspects of a job that are important, but will go unevaluated. Finally, the emphasis on individual performance may have a detrimental effect on team efforts, causing friction when goal achievement requires the services of the same common functional unit.

V. A CRITIQUE OF THE FEDERAL MERIT PAY SYSTEM

A. GENERAL CONSIDERATIONS

There are several factors that may lead to potential problem areas in implementing a merit pay system in the Federal government. The first thing that comes to mind when thinking of the government is its size. It is the largest single employer in the country. This large size could present problems in program administration; largeness always seems to add inertia, making the process cumbersome and slow. The second thing which comes to mind is that the government is bureaucratic in nature and exists to serve the public. Viewed from the outside, it has no tangible products, and in other than a few isolated instances, there are no measurable outputs, aside from huge amounts of paper. The primary function of the Department of Defense is national security, something which ties up large amounts of assets, but is difficult to evaluate in quantitative terms. Specific to the Navy, there are areas where units of measure do exist, such as in shipyards, repair facilities, test and evaluation units, etc., but in the majority of cases the mission of an organization falls into the nebulous area of national defense. This may present problems in determining valid measures of performance. Of course, many of the civilian positions are located in support functions, making

the problem somewhat easier. Of these two factors, large size is easiest to treat. The workforce can be partitioned into smaller units, broken down by mission area, to make it manageable. Each of these smaller units must then attempt to determine valid measures of its mission performance; each is then faced with the problems of product discrimination and effective performance measures.

In implementing the Merit Pay System as required by the Civil Service Reform Act, the Navy has relied on an MBO approach. As envisioned by the Navy, general guidance for overall service goals is issued by the Secretary of the Navy, and all subordinate organizations, down to the individual level, attempt to dovetail their goals to this general guidance, dependent on specific missions. The entire Department is broken down into smaller units, each designated as a Merit Pay Unit. Each unit can contain as many as several hundred employees, or have less than twenty. Goal setting takes place in June, and the performance period is the following twelve months, ending with appraisals the following June. Incentive awards for this period are made in October, a separation of three months between evaluation and response. The amount of money associated with each rating is determined by not only the number of employees in the unit, but the relative grades and performance ratings of each employee. Cash awards are available in addition to the awards from the money pool.

A great deal of time and effort was spent in training managers and supervisors on how to establish, measure, and evaluate goals and objectives. The Navy has followed the advice of most of the authors presented thus far and has open communications about the system and its interworkings. There is no secrecy about the method of merit increase determination, so in these areas they receive high marks. But, as mentioned above, the biggest obstacle to success will be determining meaningful, measurable objectives in light of the nature of the business. Hand-in-hand with this are the problems of maintaining consistancy across a very large organization to insure that objectives of equal difficulty are being selected, and guarding against organizational parochialism.

In addition to those mentioned above, there are specific problem areas which are potential obstacles to a successful program. One is the decrease in the motivation value of money as social class increases. The Merit Pay System has been implemented for managers and supervisors in the three highest remaining grade levels of the general schedule. These positions are far from the rank-and-file level where money was found to have its highest motivational potential, and since these positions are far above the national median income level, there is serious doubt that money will have any significant effect on productivity. As was mentioned

earlier however, this may be a function of the size of the incentive, which brings up the next potential obstacle.

The amount of money in the pool is limited, which constrains the size of individual awards. From the studies cited, it is clear that if money is to have impact, it must be of credible size, Locke's argument aside. Using a hypothetical case of a 6.2 percent comparability increase, with one-half or 3.1 percent being given as a minimum, a merit increase of another 13.1 percent would have to be added to the minimum if a 10 percent real increase is to be given, making the total increase 16.2 percent. (This assumes that the comparability increase will keep pace with cost-of-living, something that has not been the case in the past several years.) In an article by Hunter and Silverman entitled "Merit Pay in the Federal Government" [Ref. 77], the authors supposed a comparability adjustment of 6.2 percent and performed a sample comparison of the difference in pay increases under the old and new systems for 11 employees of a hypothetical agency. The end result was that employees with outstanding ratings received less than five percent more under merit pay, a level far below Gellerman's critical level. Thus, there seems to be no advantage to the new system if one assumes that the outstanding level employees would have been in line for a Quality Step Increase anyway.

A related problem is the separation of cost-of-living and merit increases. Under the old system an individual

received the full comparability increase each year, and dependent on length of service, could receive an additional time-in-grade increase which had real, if small, impact on his salary. Under the Merit Pay System, it is possible for an individual who meets his performance objectives to remain status quo or lose real income. There seems to be something wrong with building a merit pay system in part with the funds that were provided just to keep salaries even with the private sector increases and inflation.

Both Hamner and Hills raised the possible problem of a reduction in motivation if extrinsic rewards are offered on jobs having high intrinsic value. A great majority of the affected positions are in areas where self-esteem and self-actualization are a large part of the job, offering the opportunity for this problem to arise.

Another drawback of the system is that it is aimed at individual rather than group efforts, which may have a destructive effect on the social fabric of the organization. Emphasis is shifted to individual effort at the expense of the smooth-operating group. This increase in competition could have an adverse affect on overall efficiency. Of course, it is also possible that this increase in competition will lead to greater efficiency, but at the likely cost of a decrease in good social climate.

On the bright side, the infusion of objectivity into the appraisal system is sure to be welcomed. The process of

goal setting, which forces the individual and his supervisor to agree on the purpose of the position and on quantitative measures of performance, are steps in the right direction, even if the nature of the business makes it difficult to find valid measures. Even the problem of low levels of incentive pay may not be an obstacle if Locke's findings are valid.

B. SURVEY RESULTS

The Navy implemented the Merit Pay System (MPS) in June of 1980 with the first rating period ending in June of 1981. To determine the opinion of a sample of the affected employees (called MPS members), a survey was conducted among MPS employees at several Navy installations. The questionnaire shown in Appendix A was used to gather data from 241 MPS members. Responses were received from 128 GM-13's, 66 GM-14's, and 17 GM-15's. Two Senior Executive Service supervisors of MPS members rated the supervisory section. The questionnaire was designed to gather data at the individual level in the following areas:

- An assessment of the intrinsic value of the individual's work.
- The relevance of social and peer pressure on the individual.
- The degree of individual participation in goal setting.
- The perceived linkage of pay and performance under MPS.
- An assessment of the validity of the goals.

- An assessment of the motivational value of MPS.
- The size of the pay increase needed to motivate outstanding work.

In addition, the questionnaire attempted to measure several factors from the supervisory point of view. These areas were:

- The degree of objectivity added to the appraisal process by MPS.
- The degree to which MPS has added to management efficiency.
- An assessment of the motivational value of MPS.

The questionnaire presented a number of statements and asked respondents to check their level of agreement or disagreement with the statements. The degree of agreement or disagreement provided a subjective measure for analysis. The first three statements discussed were an attempt at assessing the intrinsic motivational value of the individual's work, and the degree of the respondent's potential for self-actualization, as measured by the individual's satisfaction with their work. The three statements are shown below along with the measurement scale and the percentage of responses at each level along the scale.

Questionnaire statement: I find my current job challenging.

strongly agree				strongly disagree
+	+	+	+	+
46%	31%	15%	5%	3%

Questionnaire statement: I find my current job interesting.

strongly agree				strongly disagree
45%	34%	14%	4%	3%

Questionnaire statement: I find my current job satisfying.

strongly agree				strongly disagree
28%	35%	20%	13%	4%

The data appears to indicate that although a majority of the respondents found their work both challenging and interesting, there is a relative decrease in the number who found their work satisfying. On the statement concerning job satisfaction, there is a drop of almost twenty percent in the strongly agree category, but the majority still agree with the statement. This would seem to leave the door open for the injection of some extrinsic motivators.

An attempt at measuring the degree to which the respondents felt the need for social and group acceptance was made with the following statement. Again, the percentage of responses along the measurement scale is shown.

Questionnaire statement: It is important to me that my fellow workers think that I am doing a good job.

strongly agree				strongly disagree
45%	35%	14%	3%	3%

The need for group affiliation and social acceptance is indicated by the high degree of agreement with this statement.

This strong agreement indicates that any program should take this need into consideration and not do anything that might distort or destroy it.

The next two statements attempted to determine the degree to which the respondents felt that they participated in determining their own goals, and in determining the manner in which the goals were achieved.

Questionnaire statement: I have freedom in determining my own MPS goals.

strongly agree				strongly disagree
27%	34%	22%	10%	7%

Questionnaire statement: I have freedom in determining the manner in which my goals are achieved.

strongly agree				strongly disagree
24%	44%	18%	11%	3%

The data indicates that there is a slightly higher degree of participation in deciding how goals are to be achieved, than in the actual determination of goals. This may be an indication of the problem of the difference in perception between the supervisor and the employee of the function and requirements of a position. The important aspect of employee participation needed in a successful program is evident.

The degree of feeling about the validity of the goals, and whether they were realistic and meaningful for the

position, was measured by the following statement. Additionally, it attempted to measure the degree to which the employee felt that MPS added objectivity to the performance measures.

Questionnaire statement: MPS has helped me by letting me set realistic and meaningful goals for my position.

strongly agree				strongly disagree
+	+	+	+	+
1%	7%	22%	25%	45%

The majority of respondents disagreed with the statement, and a near majority strongly disagree. This seems to indicate that the MPS process has not helped the individual come to an agreement with his supervisor on the goals and requirements of his position. Several interesting pieces of data come to light when comparing the responses to this statement and the one dealing with freedom in determining goals. Sixty-five percent of those agreeing that they have freedom in determining their goals disagreed with the statement that MPS helped them by letting them set realistic and meaningful goals. Nineteen percent of those strongly agreeing that they have freedom in selecting their goals strongly disagree with this statement. This seems to indicate that either the selection of realistic and meaningful goals is not particularly helpful or that the goals they had freedom in selecting were not realistic and meaningful. A third possibility is that they had been able to set realistic goals prior to MPS and therefore MPS added nothing new.

The responses to the next two statements attempted to determine if the respondents felt that they performed better under MPS and whether MPS had motivated improved performance.

Questionnaire statement: I feel I perform better under MPS.

strongly agree				strongly disagree
1%	4%	12%	26%	57%

Questionnaire statement: I think MPS has motivated me to improve my performance.

strongly agree				strongly disagree
0%	7%	10%	23%	60%

The data shows a strong majority in disagreement with both statements indicating that MPS has neither given the respondents a personal feeling of better performance, nor has it motivated them toward improved performance. The very low percentage of agreement with these statements should raise serious questions as to value of MPS as a motivational device.

The degree of perceived linkage between pay and performance was measured by the following statement.

Questionnaire statement: I feel there is a direct linkage between pay and performance under MPS.

strongly agree				strongly disagree
2%	5%	13%	22%	58%

Again, there is a strong majority that disagrees with this statement, indicating a failure of the system to produce the perception of one of the primary requirements for a successful program, the linkage of pay and performance. Without this perception of linkage, the program cannot succeed.

The final question asked of all respondents had to do with the amount of the pay increase they felt should be awarded with a "substantially above target" rating, given that a realistic set of goals for their position had been determined. The data is summarized below, indicating the percentage of responses at various levels of pay increase. percent intervals common to the responses.

% pay increase	1-4	7.5	5	10	15	20	25
response	6%	7%	22%	42%	13%	9%	1%

Thus, a near majority of respondents feel a 10 percent pay increase is required to elicit outstanding work.

The final statements on the questionnaire were directed at supervisors of MPS members. The first was an attempt to determine whether the respondents felt that objectivity had been added to the performance appraisal system by MPS. This statement and the results are shown below.

Questionnaire statement: I find that MPS goal setting has helped me to evaluate subordinate performance in a more objective manner.

strongly agree				strongly disagree
2%	14%	24%	28%	32%

Thus, a majority disagree with the statement, indicating that objectivity has not been added to the evaluation process. This is a surprising result recalling that the MPS is based on an MBO foundation.

The next statement attempted to evaluate whether the supervisors thought that MPS has helped them manage their subordinates more effectively, and indirectly, whether the addition of objectivity was deemed helpful.

Questionnaire statement: I feel that MPS has helped me manage my subordinates more effectively.

strongly agree				strongly disagree
+	+	+	+	+
2%	11%	20%	30%	37%

As can be seen, two-thirds of the respondents are in disagreement with this statement. Apparently, the MPS process has done little to aid supervisors in their relations with their subordinates. The problem may be with the word "effectively" in the statement, which may connote something different than the author's intent.

The final statement attempted to determine whether the supervisors thought that MPS has had a positive effect on subordinate performance.

Questionnaire statement: I think that the linkage of pay to performance has had a positive effect on subordinate performance.

strongly agree				strongly disagree
+	+	+	+	+
1%	8%	13%	19%	59%

This indicates less than ten percent agreement while a striking fifty-nine percent strongly disagree with the statement. This again points to the failure of MPS to produce motivational results.

A number of comments concerning MPS were returned with the survey forms. There were several comments about the positive aspects of the goal setting process and improved communications, but the majority of the responses called attention to the failures of the program. It should be pointed out at this time that subsequent to the June appraisal period and prior to the payout in October, the General Accounting Office ruled that the Navy payout formula was not valid, and required additional work. Part of the payout was delayed beyond the October date. This may have had some effect on the survey data, but the general flavor would have undoubtedly remained the same.

A sample of the comments are shown below.

> Awards are not based directly on meeting or exceeding established goals between the supervisor and subordinate, but are relative to the performance of other MPS members.
>
> MPS is a failure. To tie cost-of-living to performance is managerially stupid.
>
> The time, frustration, and irritation associated with this program are directly subtractive from my efforts to support the Navy.
>
> The communications aspects of MPS are excellent.
>
> The strong MPS emphasis on quantitative goals forces our top level managers into stressing the less important goals, since they are generally measurable. . . . We find ourselves listing EEO and Energy goals instead of our true mission.

The amount of time spent in paperwork for the results is excessive.

The general increases offered are not sufficiently large enough to motivate a GM 13-15 to work harder or more productively. Individual pride is a larger motivator.

Thus far about the only plus for MPS is the increased/improved communications with my supervisor.

Although (MPS) results in a more objective rating capability, it is not a motivator and is less efficient from a viewpoint of the total time involved in the whole process.

Good performance is not rewarded as it was under the old system.

MPS has one good point. It forces me and my supervisor to communicate on a periodic basis.

The tremendous increase in paperwork is an impediment to increased productivity.

Doing and completing a job in a highly satisfactory manner is my motivation. Dollars can't buy that "sense of accomplishment."

I work hard because I like to and it's my job to. MPS isn't much of an incentive because there's no money in MPS.

(The) trouble with MPS is that it reinforces an adversary role rather than to further our common interests and goals.

A high performer usually sets high standards for himself--usually beyond his normal capability. This induces the individual to continuously strive for excellence. However, under MPS, since a person's pay depends on his achieving and exceeding his goals, he is encouraged to lower his standards. Consequently, MPS encourages mediocrity.

I lost approximately $1000 annual increase due to MPS rules versus normal within-grade-increase. It may have been an additional $1300 loss since I would have been a candidate for a Quality Step Increase had I not been covered by MPS. My subordinates' and my own morale reached the lowest it has been in our collective government employment experience.

The Merit Pay System makes me want to be less of a "team member" especially if you see that other members of the team obtained higher ratings partly based on your cooperation in meeting the department goal. I now feel less compelled to contribute toward a common goal than I did prior to MPS.

I find that in the first year there was no substantial change in the performance of subordinate MPS members. I am looking for a change in the second or third year.

The amount of money spent on training and the amount of time involved in MPS can never be regained in value. The amount of time spent on MPS and result of monetary gain to the individual (average less than $200) is the greatest factor in turning off individuals to the system. The MPS system as applied to professional employees leaves a lot to be desired. Overall evaluation: a total disaster!

VI. CONCLUSION

This paper has reviewed several approaches to motivation in the workplace. Particular interest has been paid to the value of money as a motivator and its use as an incentive reward. The linkage of performance to pay was presented in the discussion of merit pay systems. The interest in this method of linkage was in response to the requirement of the Civil Service Reform Act for the implementation of the Merit Pay System for a portion of the Federal workforce. It can be inferred from this requirement that the authors of the Act made a determination that money could be used to motivate. This inference was supported by the literature given certain conditions, but as was pointed out previously, the existence of these conditions in the Federal sector is not clearcut.

The use of monetary incentives in merit pay systems was found to be an effective method of motivation given that a number of conditions are met. In examining the work environment encountered by the civilian workforce of the Navy, it was found that there were obstacles which had the potential to reduce the effect of merit pay or render it not workable. As survey data on the program the Navy implemented has shown, MPS has indeed failed to produce the desired result of increased productivity in the opinions of both employees and

their supervisors. A number of reasons for this failure can be cited.

Because of the pool concept, where a pool of money is divided up among all members based on a number of shares determined during the evaluation process, the dollar payout for a specific performance rating can vary from year to year. When a number of pay units are established to make their size smaller and more manageable, the payout for the same level of job input can vary considerably from unit to unit, dependent on how the managers within the individual units have structured their objectives and the degree of difficulty in goal achievement within the unit. This violates two principles, that of pay equity and that of expectation, i.e., expecting one reward and receiving another.

There are limits placed on the number of awards in each category, forced by a requirement for a statistically normal distribution of ratings. There are also limits placed on the amount and number of cash awards. Each of these limits places an artificial constraint on the system which increases the mistrust of the members. They feel an arbitrary decision can eliminate the year's worth of hard work they may have contributed.

The cause and effect linkage so important to pay-for-performance programs is not strong under MPS. The fact that the rating period is one year long, after which at least three months goes by before the first actual reward is

reflected in an employee's paycheck is a weak point. The appraisal and awards should have minimum separation in time to be effective, and there should be a mechanism to reward outstanding performance throughout the year.

The use of comparability money in the MPS pool is questionable. These funds should be left alone. Herzberg's findings that money tends to be a dissatisfier when it fails to appear is strongly reenforced here. This is coupled with the fact that many employees have discovered that even though they have performed their assignments in a completely satisfactory manner, they have lost money relative to the former system. It strikes many MPS members that it is morally wrong to tamper with money meant to just keep them even with the private sector. The strong resentment of the loss of money under MPS is a cancer that can spread across the entire system.

Something is basically wrong with the objective setting process. Neither the employees nor their supervisors see the supposed addition of objectivity to the evaluation process as helpful. Several comments allude to the use of objectives that are easily measurable, strictly for that reason. Rather than being true goals of the position, the whole system is being forced to accept goals that are measurable and not necessarily meaningful or realistic. This is in part a manifestation of the desire for multiple goals

vice one or two that are truly reflective of the position requirements.

The bureaucratic nature of the government has made its presence known in the vast amount of paperwork and time spent in administration of a system that was intended to increase productivity. Perhaps the pains of introducing a new program can account for this, but for whatever cause, it must be reduced.

Finally, the problem of the size of the monetary incentive is raised again. MPS is at best a half-hearted attempt at using money to motivate. The size of the stakes are not even close to getting into the game. Indications from the literature are for increases of at least 20 percent and the majority of the survey respondents agree on a 10-15 percent increase to motivate outstanding work.

To conclude, the conditions necessary for a successful pay-for-performance program do not exist in the Federal environment. A combination of situation imposed constraints coupled with the structure of the program as implemented has resulted in the alienation of both supervisors and employees. Money was intended to motivate, but the fact that satisfactory employees have lost money vice the former system has reduced the enthusiasm of both employees and supervisors. Major rework is required to produce the desired benefits of increased productivity.

APPENDIX A

QUESTIONNAIRE

Your grade____ Years of service____ Are you pay capped?_____

1. If you are an MPS member, answer the following:

	strongly agree				strongly disagree
	+	+	+	+	+
I find my current job challenging.					
I find my current job interesting.					
I have freedom in determining my own MPS goals.					
I have freedom in determining the manner in which my goals are achieved.					
It is important to me that my fellow workers think that I am doing a good job.					
I find my current job satisfying.					
MPS has helped me by letting me set realistic and meaningful goals for my position.					
I feel I perform better under MPS.					
I feel that there is direct linkage between performance and pay under MPS.					
I think MPS has motivated me to improve my performance.					

Given that you can determine a realistic set of goals for your position, how much pay increase do you think should go along with a "substantially above target" rating? _____%

Feel free to use the reverse side of this sheet for any comments you may have concerning MPS.

2. If you are a supervisor of MPS members answer the following:

	strongly agree				strongly disagree
	+	+	+	+	+
I find that MPS goal setting has helped me to evaluate subordinate performance in a more objective manner.					
I feel that MPS has helped me manage my subordinates more effectively.					
I think that the linkage of pay to performance has had a positive effect on subordinate performance.					

LIST OF REFERENCES

1. Civil Service Reform Act of 1978.

2. Ibid.

3. Ibid.

4. Ibid.

5. George, C. S. Jr., The History of Management Thought, Prentice-Hall, Inc., 1968.

6. Ibid., p. 59.

7. Stoner, J. A., Management, Prentice-Hall, 1978.

8. Ibid., p. 34.

9. Massio, J. L., Essentials of Management, 2nd ed., Prentice-Hall, Inc., 1971.

10. Taylor, F. W., Principles of Scientific Management, Harper and Brothers, 1911.

11. Taylor, F. W., Scientific Management, Harper and Brothers, 1947.

12. Stoner, Management, p. 36.

13. Ibid., p. 37.

14. McGregor, D., The Human Side of Enterprise, McGraw-Hill Book Co., Inc., 1960.

15. Munsterberg, H., Psychology and Industrial Efficiency, Houghton Mifflin Company, 1913.

16. Reothlisberger, F. J., and Dickson, W. D., Management and the Worker, Harvard University Press, 1939.

17. Stoner, Management, p. 48.

18. Gellerman, S., Motivation and Productivity, American Management Association, 1963.

19. Schein, E. H., Organizational Psychology, Prentice-Hall, Inc., 1965.

20. Ibid., p. 49.

21. McGregor, The Human Side of Enterprise, pp. 33-34.

22. Koontz, H. and O'Donnell, C., Principles of Management, 3rd ed., McGraw-Hill Book Co., 1964.

23. Weber, M., The Theory of Social and Economic Organizations, Free Press, 1947, translated by A. N. Henderson and T. Parson.

24. Lawless, D. J., Effective Management: Social Psychological Approach, Prentice-Hall, Inc., 1972.

25. Argyris, C., "Individual Actualization in Complex Organizations," Mental Hygiene, XLIV, 1960.

26. Mayo, E., The Social Problems of an Industrial Civilization, Harvard University School of Business, 1945.

27. Schein, Organizational Psychology, p. 51.

28. Zaleznik, A., Christensen, C. R., and Roethlisberger, F., The Motivation, Productivity, and Satisfaction of Workers: A Prediction Study, Harvard Business School, 1958.

29. Roethlisberger, F. J., Management and Morale, Harvard University Press, 1962.

30. Ibid., pp. 24-25.

31. Ibid.

32. Likert, L., New Patterns of Management, McGraw-Hill Book Co., 1961.

33. Argyris, C., Understanding Organizational Behavior, The Dorsey Press, Inc., 1960.

34. Schein, Organizational Psychology, p. 59.

35. Whyte, W. F., Money and Motivation: An Analysis of Incentives in Industry, Harper and Row, 1955.

36. Seashore, S. F., Group Cohesiveness in the Industrial Work Group, University of Michigan, 1954.

37. Whyte, W. F., Human Relations in the Restaurant Industry, McGraw-Hill Book Co., 1948.

38. Lawless, D. J., Effective Management: Social Psychological Approach.

39. Maslow, A. H., Motivation and Personality, 2nd ed., Harper and Row, 1970.

40. Schein, Organizational Psychology, p. 66.

41. McGregor, The Human Side of Enterprise, pp. 47-48.

42. Herzberg, F., Mausner, B., and Synderman, B., The Motivation to Work, Wiley, 1959.

43. Schein, Organizational Psychology, p. 66.

44. Argyris, C., Integrating the Individual and the Organization, John Wiley, 1964.

45. Gellerman, Motivation and Productivity, pp. 161-162.

46. Nash, A. N., and Carrell, S. J., Jr., The Management of Compensation, Brooks/Cole Publishing Co., 1975.

47. Moore, L. S., "Motivation Through Positive Reinforcement," Supervisory Management, Oct., 1976.

48. Herzberg, F., Mausner, B., and Synderman, B., The Motivation to Work, p. 83.

49. Opshal, R. L., and Dunnette, M. D., "The Role of Financial Compensation in Industrial Motivation," Psychological Bulletin, 1966, no. 66.

50. Herzberg, F., and others, Job Attitudes: Review of Research and Opinion, Psychological Services of Pittsburg, 1957.

51. Lawler, E. E., Pay and Organizational Effectiveness: A Psychological View, McGraw-Hill Book Co., 1971.

52. Renuich, P. A., and Lawler, E. E., "Work," Psychology Today, May, 1978.

53. Mode, A., "Making Money the Motivator," Supervisory Management, Aug., 1979.

54. Adams, I. S., "Toward an Understanding of Inequity," Journal of Abnormal Social Psychology, 1963, no. 67.

55. Vroom, V. H., Work and Motivation, John Wiley and Sons, Inc., 1964.

56. Viteles, M. S., Motivation and Morale in Industry, Norton, 1953.

57. Vroom, V. H., Work and Motivation, p. 260.

58. Nash and Carrell, The Management of Compensation, p. 25.

59. Ibid.

60. Gellerman, S. W., Management by Motivation, American Management Association, Inc., 1968.

61. Ibid., p. 194.

62. Goodale, J. G., and Mouser, M. W., "Developing and Auditing a Merit Pay System," Personnel Journal, May, 1981.

63. Piamonte, J. S., "In Praise of Monetary Motivation," Personnel Journal, Sept. 1979.

64. Drucker, P. F., The Practice of Management, Harper and Brothers, 1954.

65. McGregor, D., The Human Side of Enterprise, pp. 77-88.

66. Schuster, F. E., and Kindall, A. F., "MBO--Where We Stand," Human Personnel Management, Spring, 1974.

67. Stimson, R. A., "Performance Pay--Will It Work?" Defense Management Journal, July-Aug., 1979.

68. Lawler, E. E., "Merit Pay: Fact or Fiction?" Management Review, April 1981.

69. Farmer, R. C., "Merit Pay: Viable?" Personnel, Sept.-Oct., 1978.

70. Hamner, C. W., "How to Ruin Motivation with Pay," Compensation Review, vol. 7, no. 3, 1977.

71. Hills, F. S., "The Pay-for-Performance Dilemma," Personnel, Sept.-Oct., 1979.

72. Piamonte, "In Praise of Monetary Motivation."

73. Stimson, "Performance Pay--Will It Work?"

74. Hamner, "How to Ruin Motivation with Pay."

75. Adams, L., Managerial Psychology, The Christopher Publishing House, 1965.

76. Stimson, "Performance Pay--Will It Work?"

77. Hunter, R. W., and Silverman, R. S., "Merit Pay in the Federal Government," Personnel Journal, Dec. 1980.

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